



T e c h n i c a l
G u i d e

Nikon



The New Standard in Professional Photography

For nearly four decades, Nikon F series cameras have been the choice of professional photographers and others who demand the finest equipment. The reason? Nikon's uncompromising commitment that demands excellence and defies obsolescence. Take the Nikon F lens mount, for example—it's a design that has served the pros well for years, and will continue to do so well into the next century. Then there's the Nikon System, an array of accessories and attachments that is unmatched in variety and performance.

It all began with the Nikon F in 1959, followed by the F2 in 1971, the F3 in 1980 and the F4 in 1988. All legendary cameras in their own right, each incorporated the finest elements of its predecessors while offering the latest advances in technology and design to meet the increasingly diversified needs of the pros.

Now, Nikon takes professional photography another rung up the evolutionary ladder with the groundbreaking F5. It offers everything professionals need to get the shots they demand, including durability, speed, versatility and more. Housed in a rigid aluminium alloy chassis, the F5 is built to take the extremes of the most punishing of assignments. It also boasts the world's first 3D Colour Matrix Metering system, a film advance speed of eight frames per second with Focus Tracking, an innovative autofocus system with five separate detection sensors, the most intelligent auto exposure system around, and of course, full compatibility with the Nikon System of lenses and accessories.

The Nikon F5—Nikon's finest expression of what professional photography is all about.



Design meeting



Debugging software



Adjusting AF sensors



Cold-resistance test



Designing by CAD



Electronic circuit assembly line

Major Features of the Nikon F5

Advanced Autofocus System

- New Multi-CAM1300 sensor with five focus detection areas
- Newly designed CPU provides enhanced detection speed and accuracy
- Choice of Dynamic AF and Single Area AF modes
- High-speed Focus Tracking synchronised with 8 frames-per-second* film advance

Advanced Exposure Metering System

- New RGB (Red-Green-Blue) sensor with 1,005 pixels
- Evaluates scene colours to provide optimum exposure value
- Algorithmic patterns from a database of more than 30,000 scenes for exposure evaluation
- Flexible Centre-Weighted Meter
- Spot Meter corresponds to the focus area selected

Exposure Control

- P, S, A, M, Flexible Program, Exposure Compensation, Auto Exposure/Flash Bracketing—all built-in
- Shutter speeds up to 1/8000 sec.
- 1/3 EV step control for shutter speed and aperture

3D Multi-Sensor Balanced Fill-Flash

- 5-segment TTL flash sensor
- Unique Monitor Pre-flash system with Nikon Speedlights SB-26 and SB-27
- Distance Information integration

Advanced Performance Flash System

- Flash sync of 1/250 sec.; 1/300 sec. sync TTL flash control also available via Custom Setting #20
- FP High-Speed Sync capability with sync speeds from 1/250 to 1/4000 sec. (with Nikon Speedlight SB-26)
- Slow Sync
- Rear-Curtain Sync

High-durability Design

- Floating mechanism for quiet operation
- Titanium viewfinder housing
- Strong die-cast body and aluminium-alloy housing for optimum reliability
- Enhanced resistance to rain
- Self-diagnostic double-bladed shutter, featuring Nikon's exclusive Shutter Monitor, tested to 150,000 cycles

Other important features

- Nikon F mount
- AF start buttons—for horizontal and vertical shooting
- Alternate shutter release button for vertical shooting
- Electronically controlled depth-of-field preview function
- Fast film rewind (4 sec.* with 36-exp. film roll)
- Manual film rewind
- Custom Settings
- 10-pin remote terminal
- Personal Computer Link
- Optional Ni-MH Battery Unit MN-30 for top performance
- Interchangeable viewfinders
- Multi-Control Back MF-28 and Data Back MF-27

* With the optional Ni-MH Battery Unit MN-30 at normal temperatures.

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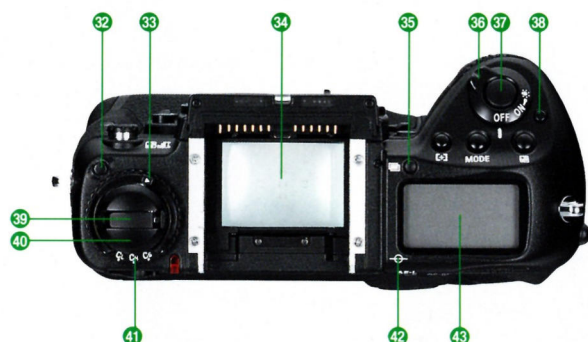
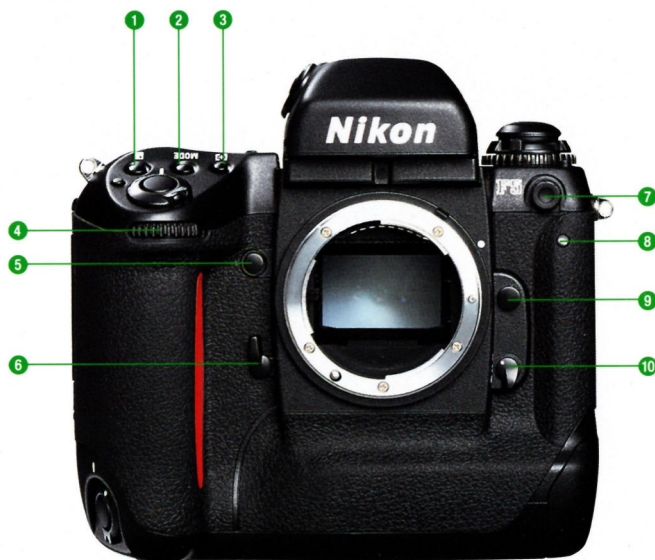
Custom Settings P. 22



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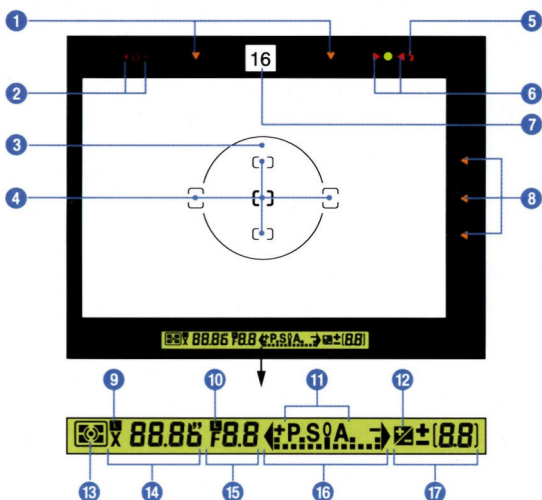


- 21 Focus area selector
- 22 Film rewind button 1
- 23 10-pin remote terminal
- 24 Rear control panel cover
- 25 Rear LCD panel
- 26 AF start (AF-ON) button for vertical shooting
- 27 Film speed (ISO) button
- 28 Flash sync mode () button
- 29 Auto Exposure/Flash Exposure Bracketing (BKT) button
- 30 Shutter speed/aperture/focus area lock (L) button
- 31 Custom Setting Menu (CSM) button
- 32 Film advance mode selector
- 33 Camera back lock release
- 34 Interchangeable focusing screen
- 35 Multiple exposure () button
- 36 Power/LCD panel illumination switch

- 37 Shutter release button
- 38 Power switch lock release
- 39 Film rewind crank
- 40 Film rewind knob
- 41 Film advance mode/self-timer selector
- 42 Film plane indicator
- 43 Top LCD panel
- 44 Accessory shoe
- 45 Camera strap eyelet
- 46 Battery holder
- 47 Battery holder release knob
- 48 Dioptre adjustment knob
- 49 Metering system selector
- 50 Camera strap eyelet
- 51 Vertical-shooting shutter release button
- 52 Lock lever for vertical-shooting shutter release button

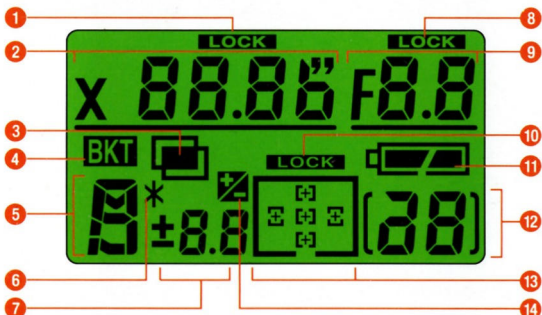
- 1 Exposure compensation () button
- 2 Exposure mode (MODE) button
- 3 AF area mode button (E)
- 4 Sub-Command Dial
- 5 Depth-of-field preview button
- 6 Mirror lockup lever
- 7 Sync terminal
- 8 Self-timer indicator LED
- 9 Lens release button
- 10 Focus mode selector
- 11 Film rewind lever 2
- 12 Film rewind lever 2 lock release
- 13 Alert LED
- 14 Finder release button
- 15 Eyepiece shutter lever
- 16 Viewfinder eyepiece
- 17 Auto Exposure/ Autofocus Lock (AE-L / AF-L) button
- 18 AF start (AF-ON) button
- 19 Main-Command Dial
- 20 Film cartridge confirmation window

Viewfinder Information



- | | |
|---|--|
| 1 Focus area indicators | 9 Shutter speed lock indicator |
| 2 Exposure level | 10 Aperture lock indicator |
| 3 12mm-dia. reference circle for Centre-Weighted Metering | 11 Exposure mode |
| 4 Focus brackets/Spot Metering (4mm-dia.) area | 12 Exposure compensation |
| 5 Ready light | 13 Metering system |
| 6 Focus indicators | 14 Shutter speed |
| 7 Aperture direct-readout | 15 Aperture |
| 8 Focus area indicators | 16 Electronic analogue exposure display |
| | 17 Frame counter/exposure compensation value |

Top LCD Panel Indications



- | | |
|---|----------------------------|
| 1 Shutter speed lock | 8 Aperture lock |
| 2 Shutter speed | 9 Aperture |
| 3 Multiple exposure | 10 Focus area lock |
| 4 Auto Exposure/Flash Exposure Bracketing | 11 Battery level |
| 5 Exposure mode | 12 Frame counter |
| 6 Flexible Program | 13 Focus area/AF area mode |
| 7 Exposure compensation value | 14 Exposure compensation |

Rear LCD Panel Indications



- | | |
|--|-------------------------|
| 1 Film speed/bracketing information/custom setting | 4 Bracketing bar graphs |
| 2 Film speed setting mode | 5 Flash sync mode |
| 3 Auto Exposure/Flash Exposure Bracketing | 6 PC link connection |
| | 7 Custom setting |



Controls

1 Depth-of-field preview button

When you use a lens with an automatic diaphragm, the viewfinder image is set to maximum aperture. The depth-of-field preview button stops the lens down electrically to the aperture set in any exposure mode, enabling you to verify the focusing situation of the composition.

2 Mirror lock up lever

When using super-telephoto lenses or doing photomicrography, it is necessary to reduce camera vibration to the absolute minimum. To lock the reflex viewing mirror in the "up" position, rotate the mirror lockup lever until it stops. (In this case, the exposure meter cannot be used.)

3 Sync terminal

A separate sync terminal is provided on the Nikon F5. It accepts all standard PC-type plug-in sync cords, and is threaded for use with a Nikon screw-in sync cord. Use this terminal to attach flash units which do not have the standard ISO hot shoe.

4 Top and rear LCD panel with illuminator

The Nikon F5 has two LCD panels—top and rear. Both LCDs can be illuminated by rotating the power switch.

5 ISO film speed setting

You can manually select the film speed from ISO 6 to 6400 in 1/3 steps. The rear LCD shows the setting. DX automatic operation is also possible.

6 Film rewind

The Ni-MH Battery Unit MN-30 enables fast film rewind of 4 seconds (6 sec. with eight AA-type batteries). You can also rewind the film by hand—ideal when extra silence is required.

7 Self-timer

The F5's self-timer provides a 10-second delay. Duration can be changed by the Custom Setting #16 (see P. 22).

8 Shutter speed/aperture /focus area lock button

You can lock the focus area, selected shutter speed and/or selected aperture to prevent any accidental change of settings. This is especially useful for photographers who prefer to keep using the same settings, e.g., studio photography.

9 10-pin remote terminal

Accepts Personal Computer Connecting Cord MC-33/34, Remote Cord MC-20 or MC-30, Modlite Remote Control Set ML-3 and other accessories.

10 Dioptric adjustment

Enables near- or far-sighted photographers to adjust the eyepiece dioptric within a range of -3 to +1.

11 Two button reset

By simultaneously pressing the green Bracketing (BKT) and Custom Setting Menu (CSM) buttons for over two seconds, you can reset the camera to its factory default settings including Custom Settings (A or B settings specified at Custom Setting #0).

HIGHLIGHTS



Five-area autofocus

- Five sensors create large Wide-Cross Array focus coverage
- Covers a wide area in the horizontal and vertical ranges inside the finder
- Dynamic AF automatically shifts from one focus area to another to keep track of moving subject

Focus Tracking

- Focus Tracking at up to 8 frames per second
- Unique overlap servo method for consistently sharp exposure
- Nikon's exclusive Lock-On™ feature locks focus on subject even if subject is momentarily blocked



Fast and accurate autofocus

- Precise focusing—even with subjects that appear small in the viewfinder
- Detects fast moving subjects at closer distances compared to any other system
- Optimum focusing accuracy and speed with all AF-S Nikkor lenses
- Cross-type sensors (left, centre, right) assure focus accuracy in both horizontal and vertical shooting

Plus

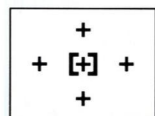
- Unique EC-B type screen with an Electrochromic (EC) device shows focus area selected
- Wide EV range
- AF start buttons
- Manual focus with Electronic Rangefinder
- Freeze Focus available with Nikon MF-28 Multi-Control Back

1) Multi-CAM1300 autofocus sensor module

Nikon designed the Multi-CAM1300 autofocus sensor module especially for the F5. The module incorporates five AF sensors that together create a large wide-cross array covering the centre, left, right, top and bottom of the frame—a wider area than that covered by any system before. Detection speed and accuracy are further enhanced for more responsive operation.

The camera features cross-type contiguous centre, left, and right sensors, each consisting of two kinds of CCD line sensors. The thin sensor is used for ordinary focus detection, and the thick sensor for focus detection in low light. This dual focus system maximises autofocus speed and accuracy in most lighting conditions.

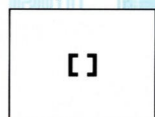
In normal AF operation, the F5 detects focus inside the viewfinder's focus brackets. But in the Focus Tracking and Dynamic AF mode, part of the focusing area is automatically expanded to keep the moving subject in accurate focus.



2) Dynamic AF mode

Select the priority focus area that suits

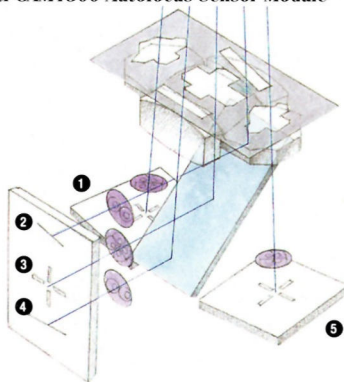
your composition, and simply aim the selected focus area at the subject and shoot—autofocus response is fast and accurate. If the subject moves, Dynamic AF instantly shifts focus to another of the five areas, and follows it. This frees you from conventional bull's-eye centred shots, so you can have more varied composition.



3) Single Area AF mode

In addition to Dynamic AF operation, the F5 provides a Single Area AF mode. It's like having a choice among five carefully positioned AF spot sensors. The selected focus area is indicated on the top-deck LCD and in the standard EC-B type screen. Inside the viewfinder a lit-up orange pointer also indicates your choice.

Multi-CAM1300 Autofocus Sensor Module

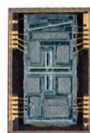


- ① Cross-type CCD sensor for the focus area on left
- ② CCD sensor for the top focus area
- ③ Cross-type CCD sensor for the centre focus area
- ④ CCD sensor for the bottom focus area
- ⑤ Cross-type CCD sensor for the focus area on right

AF sensors



For left area

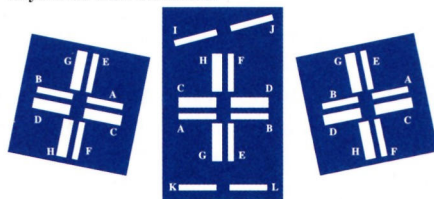


For top, centre and bottom areas



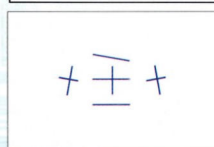
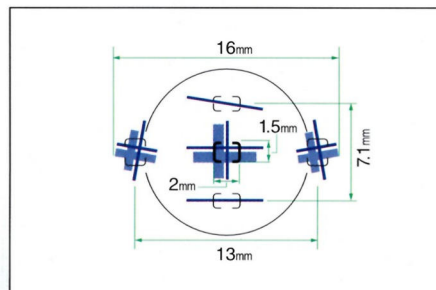
For right area

Layout of CCD elements

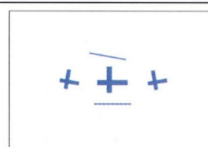


Sensor pairs: A & B, C & D, E & F, G & H, I & J, K & L
Thin sensors: A, B, E, F; used for ordinary focus detection
Thick sensors: C, D, G, H; used for focus detection in low light

Position of AF sensors in the viewfinder



Normal condition



In low light

Search Process in Dynamic AF

Selected area	2nd	3rd	4th	5th
Centre	Bottom	Top	Left	Right
Bottom	Centre	Top	Left	Right
Top	Centre	Bottom	Left	Right
Left	Centre	Bottom	Top	Right
Right	Centre	Bottom	Top	Left

The first priority is on the user-selected area. If the first sensor (user-selected area) is out of focus, the second sensor is activated and continues through all five sensors, as needed. For subsequent detection, the focus search begins from the selected area, but the second area searched will be the area used in the previous search process.

4) Choice of autofocus modes

The Nikon F5 has two autofocus modes: Single Servo AF with focus-priority and Continuous Servo AF with release-priority. In the focus-priority Single Servo AF mode, the shutter will not operate until the focus detection system determines that focus is accurate at the time of exposure. In the release-priority Continuous Servo AF mode, the shutter will release anytime you press the shutter release button, regardless of focus detection status. In either autofocus mode, and in any film advance mode, Focus Tracking automatically activates when a moving subject is detected.

5) Wide EV range

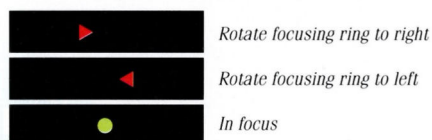
Multi-CAM1300 operates throughout the range of EV minus 1 to EV 19 (ISO 100). The F5 works through this expanded EV range—even in situations so dark the human eye has problems focusing.

6) AF start buttons

The AF start buttons are designed to activate autofocus operation anytime you want to. One button handles horizontal, the other vertical AF functions. Custom Setting #4 enables you to use the shutter release button exclusively for shutter release operation and the AF start button for AF activation. This makes for greater personal control and enhances the versatility of automatic shooting as well. For example, you can simply lock focus by removing your finger from the button in the Continuous Servo AF mode. This feature is also perfect for sports and other quick-action situations because it allows the photographer to concentrate solely on shutter release timing.

7) Electronic rangefinder

The F5's Electronic Rangefinder, which is more versatile than optical range finders, simplifies manual focusing when used with AF Nikkor or other AI-type Nikkor lenses with a maximum aperture of f/5.6 or faster. Arrows in the viewfinder indicate which direction to turn the lens focusing ring. The viewfinder's clear matte field also makes checking focus status easy.





8) Focus Tracking with Lock-On™ (up to 8 fps)

Precision Focus Tracking

When the subject starts to move, Focus Tracking is automatically activated, regardless of the autofocus mode and AF area mode selected. In combination with the five-area, Wide-Cross Array autofocus sensor module, this computer-assisted system analyses the speed of the moving subject while driving the autofocus lens and anticipates the subject's movement. Thus, focus detection is possible regardless of the direction of the subject's movement—at up to eight frames per second.

Overlap servo method

Unlike AF systems that use the stepped or intermittent method in which focus is detected and the lens is driven *alternately*, the F5's autofocus system

simultaneously detects focus and drives the lens. As a result, lens focus is constantly adjusted, even during lens driving, in accordance with the latest focus data—so the camera can track even subjects moving erratically—for consistently sharp exposures, frame after frame.

Shoot faster moving subjects

Nikon performance tests demonstrate that the F5's AF system can focus-track on subjects moving faster than other systems. For example, using a 300mm lens with the F5's Precision Focus Tracking function, it is possible to focus on a subject moving at 300km/h from a distance as close as 19.3m.

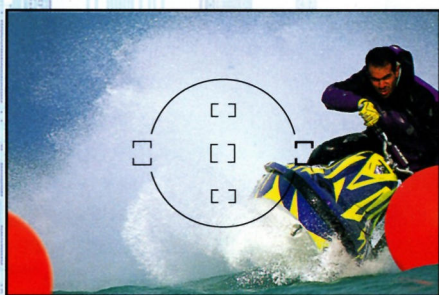
Release-priority operation

The F5's AF operation is so fast and smooth that Focus Tracking can reliably operate with shutter-release-priority at

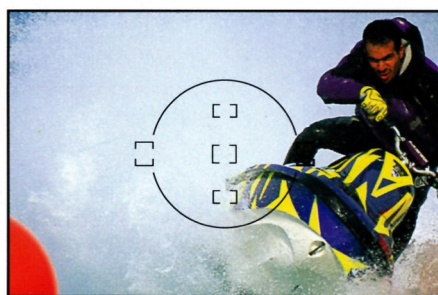
framing speeds up to eight frames per second. With other systems, the shutter is released for the first frame of a sequence whether or not autofocus operation is complete, often resulting in inconsistent focusing. The F5's continuous tracking feature assures consistently sharp focus, even with the first frame of a sequence.

Lock-On™

Once the F5's Multi-CAM1300 sensor module detects a moving subject, the autofocus system activates Focus Tracking, and locks on to the subject. Even if focus detection is momentarily interrupted by something blocking the main subject in the viewfinder, Focus Tracking with Lock-On™ will continue to track the original subject, keeping sharp focus for subsequent frames. The same function takes over even if you accidentally move the



Dynamic AF: Focus stays on the subject even though the subject moves out of the selected area by shifting focus area.

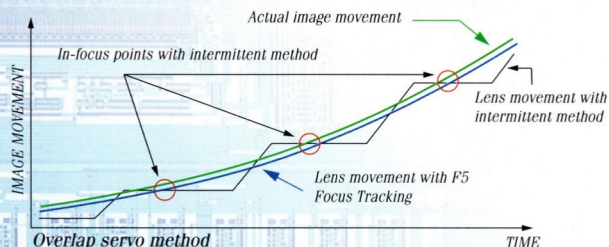


Lock-On™ autofocus



Closest Focus Tracking distance

	300mm lens	600mm lens
100m sprint (36km/h)	6.7m	13.4m
Trains, automobiles (100km/h)	11.2m	22.4m
F1 race (300km/h)	19.3m	38.7m





Nikon F5 with AF-S Nikkor
600mm 1/4D IF-ED

focus area off the subject for a moment even in Dynamic AF mode. This feature is great for sports or nature photography where something could momentarily block the main subject.

Focus Tracking in any mode

Without requiring any special setting, the F5's Focus Tracking is automatically activated when the camera detects subject movement. It works in every autofocus mode, AF area mode, and film advance mode.

9) Freeze Focus

This special feature is available with the optional Multi-Control Back MF-28. Used with all compatible Nikkor lenses and manual focusing, this feature will automatically fire the shutter when a subject comes into focus. Perfect for wildlife photography or macrophotography.

10) Innovative AF-S Nikkor Lenses

Complementing the F5's AF system is a selection of AF-S Nikkor lenses featuring sophisticated built-in Silent Wave Motors. These motors make Nikkor telephotos faster than ever, enabling them to rotate quickly and stop at precisely the right moment—the moment of sharp focus. They work so quietly that you'll think they're actually silent. Thanks to Nikon's Internal Focusing (IF) technology, lens movement is fast and virtually silent without lens barrel extension. The lens CPU provides data interface with the camera body, as well as with the subject-to-camera Distance Information used for exposure metering. Nikon's performance-proven Extra-low Dispersion (ED) glass and Nikon Integrated Coating (NIC) are also used

to assure the superb optical quality of AF-S Nikkor lenses. Nikon's M/A mode enables quick switching, with virtually no time lag, between manual focus and autofocus. Additionally, AF-S Nikkor lenses have convenient AF Lock buttons and focus range limiters, too.

11) Autofocus with AF Illuminator

It is recommended that you use a Nikon autofocus Speedlight (SB-26, 27, 23, or 22) when the brightness of available light is insufficient for autofocus operation. When the ambient light is low, these Speedlights automatically emit an LED pattern of light onto the subject, enabling the camera to focus even in total darkness. To do this, first set the camera's AF mode to S (single servo) to activate the AF illuminator, then select the centre focus area.





N i k o n

F5

HIGHLIGHTS

3D Colour Matrix Metering

- New *Red-Green-Blue* (RGB) metering sensor with 1,005-pixel CCD reads not only brightness and contrast but also scene colour
- Actual shooting data from more than 30,000 scenes stored in F5's database
- Integrates distance information when D-type AF Nikkor lens is used



Flexible Centre-Weighted Metering

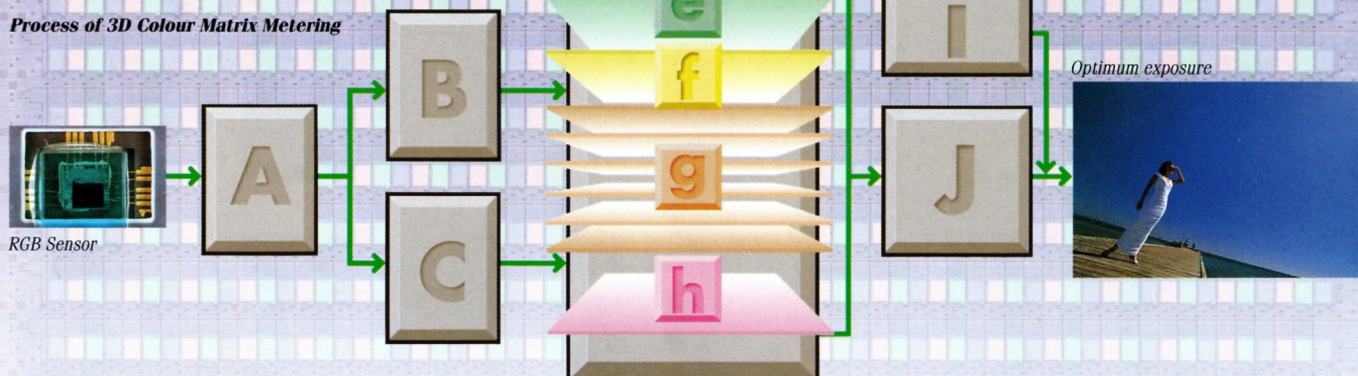
- 75% of sensitivity concentrated within 12mm circle in the centre of the viewfinder
- Size of centre circle can be changed by Custom Setting #14

Spot Metering

- Reads 4mm-diameter area corresponding to the focus area selected



Process of 3D Colour Matrix Metering



1) 3D Colour Matrix Metering

The Nikon F5 boasts a new metering sensor consisting of a 1,005-pixel CCD (charge coupled device). Each pixel has one R (red), G (green), or B (blue) filter, so the sensor evaluates not only each scene's brightness and contrast but also the scene's colours.

Using the classic metering techniques which measure for 18% reflectance, factors such as brightness and contrast are primarily used to determine exposure. The F5's 3D Colour Matrix Meter evaluates scene brightness, contrast, selected focus area, distance information and colour. Then its powerful microcomputer and database together guide it to unequalled exposure control.

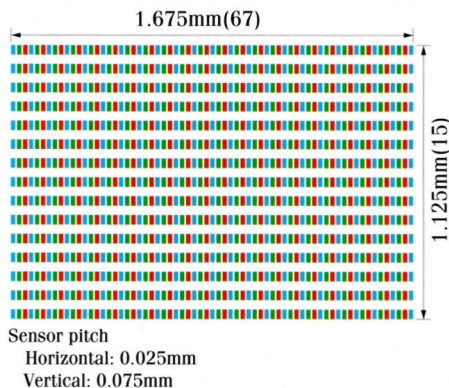
The Colour Matrix Meter can even tell if tungsten or fluorescent lighting is in use. Data from more than 30,000 scenes from actual shooting experience are stored in the F5's database.

New 1,005-pixel RGB metering sensor

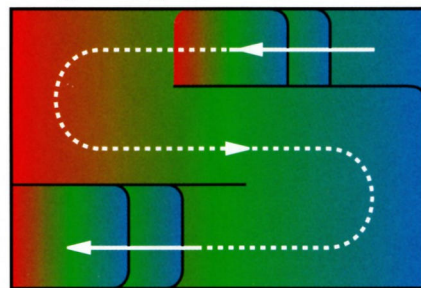
- Designed exclusively for F5 exposure metering
- High sensitivity, high accuracy, low noise and wide dynamic range
- Accurate performance proven in complex lighting conditions
- RGB filters evaluate colour information

- A.** Brightness and colour data from 1,005 pixels
B. Colour data
C. Basic data (grouped into overlapped areas)
D. Parameters
e. Colour data
f. Average brightness data
g. Contrast data
h. Position of focus area selected
I. Distance Information (from D-type lenses)
J. Database

1005-pixel arrangement



Overlapped small group reading



Brightness data from 1005-pixel CCD is grouped into overlapped areas.

3D Colour Matrix Metering process

- I) Brightness data with colour information is read from each of the 1,005 pixels in the RGB sensor.
- II) Colour information is extracted from the brightness information.
- III) Brightness data is grouped into overlapped areas.
- IV) From the colour information(II), the colour signal (average colour of the scene) is calculated.
- V) From each group determined in (III), the brightness signal (average brightness) and contrast signals are calculated.
- VI) These signals (colour, brightness and contrast) and focus area signal (selected focus area) are compared to the camera's built-in database of more than 30,000 scenes taken from actual shooting experience. The optimum exposure value is then obtained.
- VII) Finally, distance information from the D-type Nikkor lens in use is integrated to further optimise the calculated exposure value.

Benefits of 3D Colour Matrix Metering

- 1) Vertical compositions are covered by comparing vertical scene data stored in the database.
- 2) Detects poorly illuminated subjects.
- 3) Detects small subjects located in the periphery.
- 4) Backlit subjects evaluated accurately regardless of their position in the scene by overlapped small group reading.
- 5) Vivid colours are precisely evaluated resulting in natural exposures.

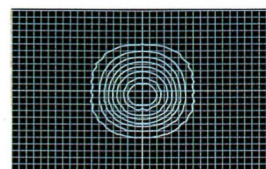
Examples of colour that can be detected by the F5

- Tungsten illumination
- Fluorescent illumination
- Yellow-coloured subject
- Blue sky
- Tender green
- Normal green
- Black/gray/white

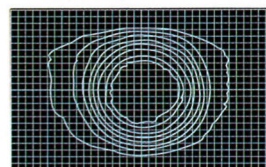


2) Flexible Centre-Weighted Metering

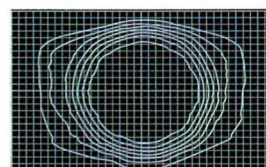
The F5 also incorporates Nikon's classic Centre-Weighted Metering which concentrates 75% of its sensitivity within a 12mm circle, and 25% in the peripheral area. It's the classic meter for those who shoot portraits, or simply want to take personal control. But if the subject is too small, too near or too far, the 12mm circle may not be the size you need. So with the F5, Nikon introduces the world's first *Flexible* Centre-Weighted Meter. Using the F5's built-in Custom Setting #14, you can change the size of the sensing area to 8mm, 15mm or 20mm, or create a simple Average meter, depending on the subject's size and distance.



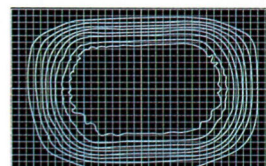
8mm-dia.



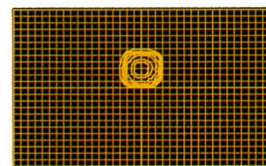
12mm-dia.



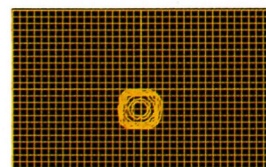
15mm-dia.



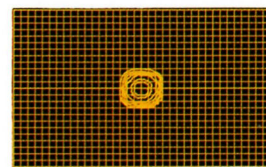
20mm-dia.



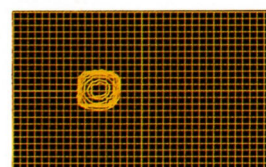
Top area



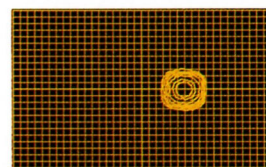
Bottom area



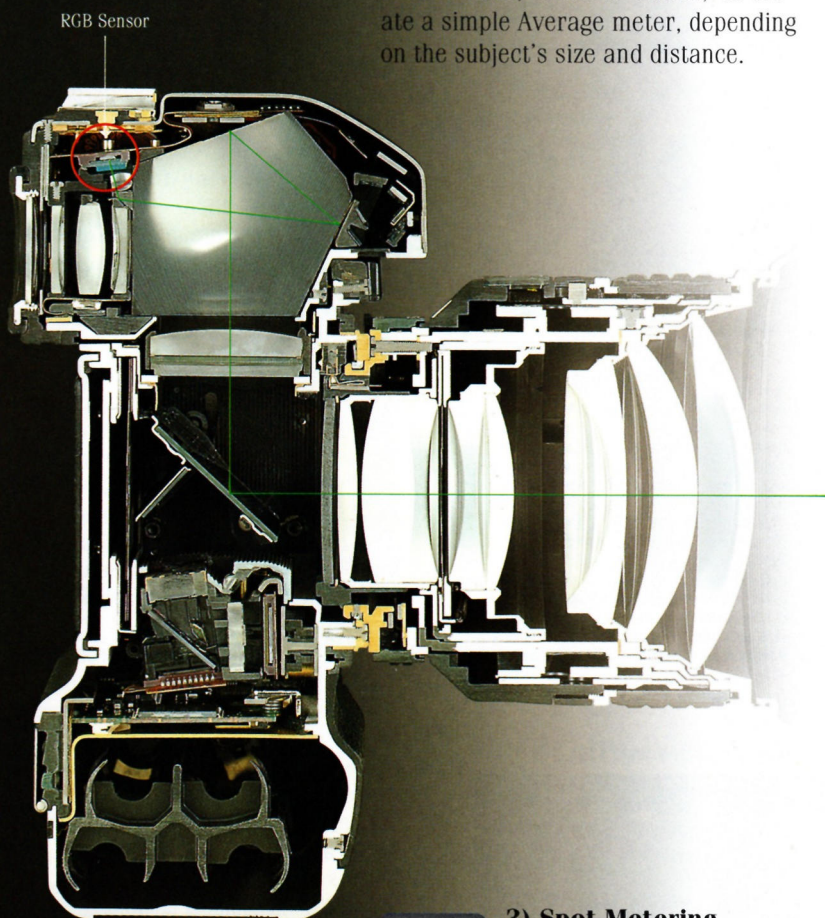
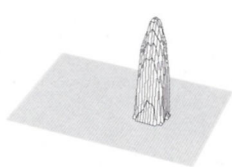
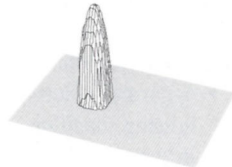
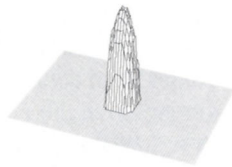
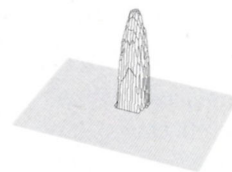
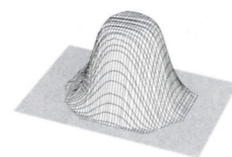
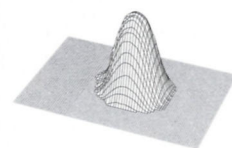
Centre area



Left area



Right area



3) Spot Metering

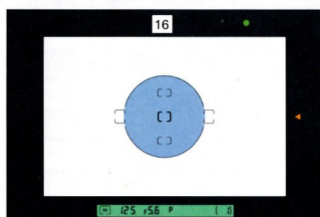
For really precise metering, the F5's Spot Metering reads a 4mm-diameter area (approx. 1.5% of the image area). This meter's sensing area changes to correspond with the manually selected focus area—ideal for when individual control is critical.

When the optional DW-30 and DW-31 viewfinders, which don't have metering sensors, are used, the F5's autofocus sensor can also function as a spot metering sensor.

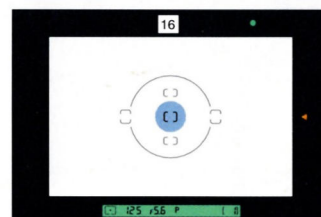
3D Colour Matrix Metering



Centre-Weighted Metering



Spot Metering





N i k o n



HIGHLIGHTS



Four exposure modes are available

- Programmed Auto with Flexible Program
- Shutter-Priority Auto
- Aperture-Priority Auto
- Manual Exposure Control

AE/AF lock

- Via AE-L/AF-L button



Multiple Exposure

- Making several exposures on the same frame is as easy as pressing a button

Exposure Compensation

- ± 5 EV in 1/3 EV increments

Auto Exposure Bracketing

- 2 or 3 frames selectable
- Optional Multi-Control Back MF-28 offers up to 9 frames

1) Exposure modes

Programmed Auto Exposure Mode

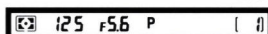
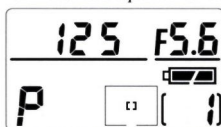
Programmed Auto operation is ideal for quick operation and is the simplest method for exposure control. Together with 3D Colour Matrix Metering, it is quite reliable.

Programmed Auto Exposure mode can only be used with lenses with a built-in CPU (i.e., AF-S, AF-I, AF and AI-P-type Nikkor lenses). For lenses without a CPU, exposure mode is automatically set to Aperture-Priority Auto (A).

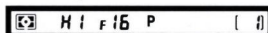
You can activate Flexible Program by turning the Main-Command Dial until the desired shutter speed or aperture value appears in the viewfinder and in the LCD panel. The Flexible Program indicator (i.e., "*") then appears to indicate that the program has been shifted. The shifted program is maintained as long as the exposure meter stays on.

LCD and viewfinder indication in P mode

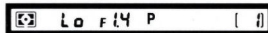
Controlled aperture value and shutter speed are virtually steplessly selected, and indicated in the viewfinder and top deck LCD in 1/3 EV steps.



Correct exposure



Overexposure; use film with a lower ISO speed or use Nikon ND filter



Underexposure; use a Nikon Speedlight or use film with a higher ISO speed

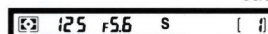
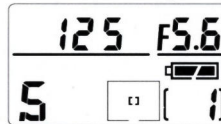
Shutter-Priority Auto Exposure Mode

This mode lets you choose shutter speeds manually. Use a fast shutter speed to stop action, or create motion effects by choosing a slower shutter speed. The Nikon F5's microcomputer automatically selects the correct aperture to match the selected shutter speed.

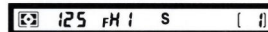
This mode is available with lenses having a built-in CPU (i.e., AF-S, AF-I, AF and AI-P-type Nikkor lenses).

LCD and viewfinder indication in S mode

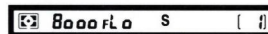
Rotate the Main-Command Dial to select the desired shutter speed from 30 to 1/8000 sec. in 1/3 EV steps.



Correct exposure



Overexposure; select higher shutter speed or use Nikon ND filter

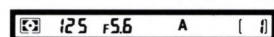
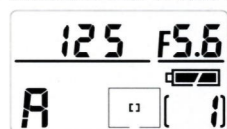


Underexposure; select lower shutter speed

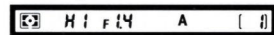
A Aperture-Priority Auto Exposure Mode

This mode operates with virtually all Ai-type lenses. You select the aperture using the lens' aperture ring or Sub-Command Dial. When used with any optical system such as a reflex lens, microscope, telescope, bellows, etc., the Nikon F5's microcomputer automatically selects the correct shutter speed to match the aperture you set. This is the recommended mode when depth of field is your prime consideration. For less distinct backgrounds, as in portraiture, use larger apertures to obtain a shallow depth of field. For overall sharp, clear pictures, as in scenic photography, use smaller apertures.

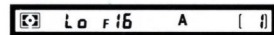
(See the lens compatibility chart on P. 23)
LCD and viewfinder indication in A mode
Set lens to desired f-number by rotating Sub-Command Dial or lens aperture ring. Shutter speed is controlled virtually steplessly from 30 to 1/8000 sec. and indicated in 1/3 EV steps.



Correct exposure



Overexposure; select smaller aperture or use Nikon ND filter

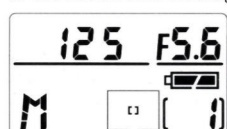


Underexposure; select larger aperture

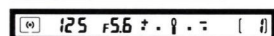
M Manual Exposure Mode

In the Manual Exposure mode, both shutter speed and aperture will be set manually to achieve the desired effect (over or under exposure). Use fast shutter speeds to stop the action, slower speeds to create motion effects or fuzzy outlines. Manual exposure mode also lets you control depth of field, either by softening the background so the main subject of the picture stands out, or by creating overall uniform sharpness. Set the shutter speed with the Main-Command Dial and the aperture with the Sub-Command Dial or lens' aperture ring. A shutter speed of up to 30 min. can be set through Custom Settings #19. (See P. 22)

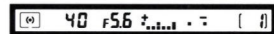
LCD and viewfinder indication in M mode
Adjust aperture and/or shutter speed referring to the Electronic Analogue Display in the



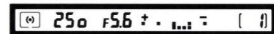
viewfinder LCD. The Electronic Analogue Display range is +2 EV to -2 EV, in increments of 1/3 EV.



Correct exposure

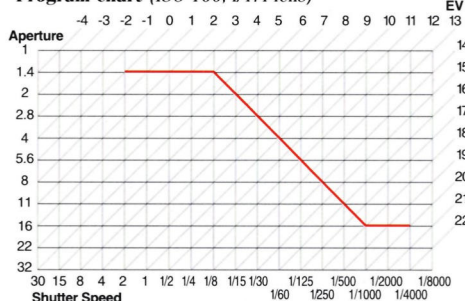


Overexposure by 1-2/3 EV



Underexposure by 1 EV

Program chart (ISO 100, f/1.4 lens)



Multiple exposure



Auto Exposure Bracketing

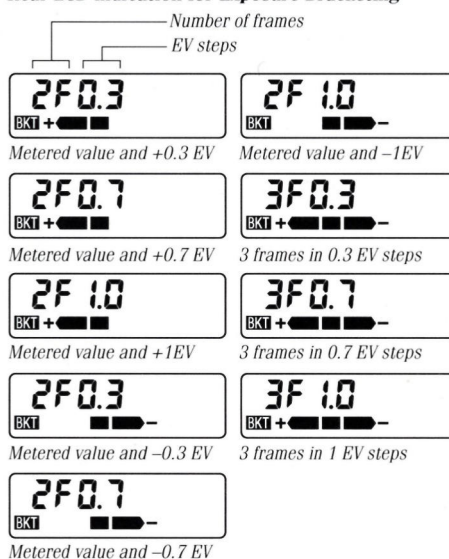


-1/3 EV



+1/3 EV

Rear LCD indication for Exposure Bracketing



2) AE-L (Auto Exposure Lock)

When you press the AE-L/AF-L button, the F5 memorises the metered exposure value with focus lock. This is great for situations where you want to change the composition or put creative emphasis on a specific part of the picture with Centre-Weighted or Spot Metering.

Only Auto exposure can be locked by pressing the AE-L/AF-L button through Custom Settings #21. (See P. 22)

3) Multiple Exposure

Taking any number of exposures on precisely the same frame is easy. Rotate the Main-Command Dial while pressing the multiple exposure button. This will prevent the film from advancing after the shutter is released. Depress the shutter release button again to take the next shot. Note that during multiple exposure operation, exposure compensation may be required, depending on subject brightness, background brightness and the number of exposures you take. Custom Setting #13 enables continuous multiple exposures.

4) Exposure Compensation

Using the exposure compensation button with the Main-Command Dial, you can compensate exposure within a range of ± 5 EV in 1/3 EV increments.

While pressing the exposure compensation button, rotate the Main-Command Dial to set the desired compensation value. The dial is graduated in 1/3 EV increments. Minus values indicate underexposures and plus values indicate overexposures.

Because the exposure compensation mark and value appear in the viewfinder as well as the top deck LCD panel, you can set the compensation value with your eye on your subject through the viewfinder.

BKT 5) Auto Exposure Bracketing

The F5's built-in Exposure Bracketing function offers exposure bracketing of two or three frames in 1/3 to 1 EV steps with all exposure modes including Manual. Moreover, with the optional MF-28 Multi-Control Back, you can get exposure bracketing for up to 9 frames. In flash photography, the flash output level is also varied. If you wish, you can use Custom Setting #24 to bracket either ambient exposure or flash exposure. (See P. 22 for details in Custom Settings)



HIGHLIGHTS



3D Multi-Sensor Balanced Fill-Flash

- Features Nikon's exclusive 5-segment TTL Multi Sensor for precise flash exposure control
- Beautifully blends fill-flash with ambient light
- Unique Monitor Pre-flashes assure correct flash exposure of main subject
- Works with all exposure meters and modes

Slow Sync

- Automatically selects slower shutter speeds so background comes out clearly even in low light



Rear-Curtain Sync

- Turns available light into a stream of light that follows the flash-illuminated subject

1/300 sec. TTL flash control

- Sets flash sync speed up to 1/300 sec. via Custom Setting #20

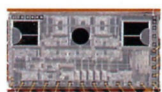
FP High-Speed Sync

- Fill-in flash at 1/250 to 1/4000 sec. possible (with SB-26)

Wireless Slave Flash

- Any number of secondary SB-26 Speedlights can be fired without their being connected to the camera

1) 3D Multi-Sensor Balanced Fill-Flash



Exclusive 5-segment TTL Multi Sensor

Nikon's pioneering TTL Multi Sensor is designed with a logical pattern segmentation that conforms to classic rules of composition. It has been carefully configured so it can handle more versatile composition requirements. Compared with other systems, in which the TTL sensor is divided into segments (one of which is weighted to the focus point selected), Nikon's five-segment sensor has been proven to contribute to better flash exposure results. Also, unlike systems in which the TTL multi-segment sensor works only in the autofocus mode, Nikon's TTL Multi Sensor works, too, in the manual focus mode.

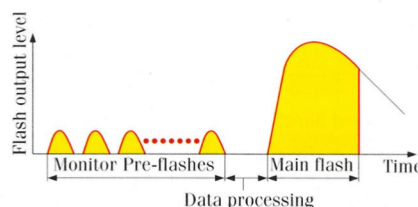
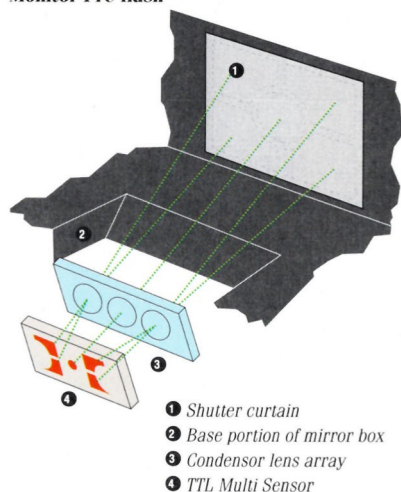
Monitor Pre-flash and Distance Information

Monitor Pre-flash is a high-tech simulation of the series of test flashes that professionals usually perform with a separate flash meter before actually taking flash photographs. Nikon's flash system has put this technique to practical use in virtually any picture-taking situation.

The Nikon SB-26 (or SB-27) Speedlight fires a series of imperceptible pre-flashes just after the mirror goes up but before the shutter opens. Upon reaching the subject, the pre-flash reflects back to the camera's TTL Multi Sensor. The camera's CPU then uses this flash data to determine in which of the TTL Multi Sensor's five segments the subject is located, taking distance and aperture setting information from the D-type AF Nikkor lens in use into consideration. In this way, the computer analyses and decides which segments of the TTL Multi Sensor to use and what amount of main flash is necessary.

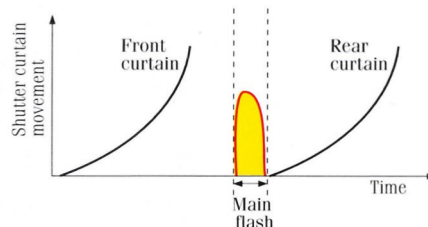
For example, if some segments indicate a reflected light amount comparatively lower, the computer judges that there is a distant background and the main subject does not belong to these areas. These segments are then ignored for the main flash output control. The computer even informs the system about the subject's reflectance. Of course, this entire process takes place in but a split second.

Monitor Pre-flash

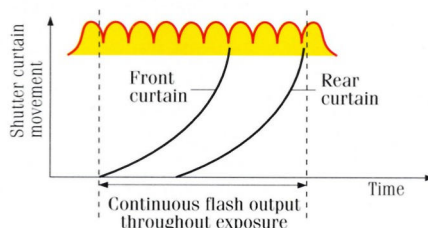


In this scene, the F5 ignores the centre segment for TTL flash control. This is because the degree of light reflected from the Monitor Pre-flash burst was exceptionally strong in that segment, thus indicating there is no subject in that area.

Rear-Curtain Sync



FP High-Speed Sync



3D Multi-Sensor Balanced Fill-Flash works with any metering and exposure mode

The F5's 3D Multi-Sensor Balanced Fill-Flash works with the camera's Matrix, Centre-Weighted and Spot meters. You can also use this feature with each of the F5's exposure control modes: P (Programmed Auto), S (Shutter-Priority Auto), A (Aperture-Priority Auto) and Manual.

This function is likewise available when other creative options are used, including exposure compensation, exposure bracketing, and Flexible Program. This means that you get maximum creative freedom while benefiting from fully automatic flash operation.



2) Slow Sync

When flash pictures are taken at high shutter speeds in dim light, the background may come out dark. The use of Slow Sync extends the automatically controlled shutter speed range in the P and A modes (which is normally controlled between 1/250 sec. and 1/60 sec.) to the full range of available shutter speeds from 1/250 sec. to the slowest speed of 30 sec.



3) Rear-Curtain Sync

The F5's Rear-Curtain Sync setting enables all Nikon TTL Speedlights to operate with Rear-Curtain Sync. Using this function, the flash fires just before the shutter curtain closes, unlike Normal Sync which fires the flash at the beginning of the exposure. This technique is especially effective when slow shutter speeds are used. The effect: available light turns into a stream of light that follows the flash-illuminated subject. Slow Sync is automatically selected when Rear-Curtain Sync is set in the Programmed Auto or Aperture-Priority Auto exposure modes.

4) FP High-Speed Sync

With the Nikon SB-26 set at the manual FP mode, you can use flash synchronization with high shutter speeds from 1/250 to 1/4000 sec. This means you can capture fill-flash pictures even when using film with a high ISO rating, and still maintain wide aperture settings for expanded control of depth of field.

5) 1/300 TTL High-Speed Sync

Custom Setting #20 effectively increases TTL flash sync speed to 1/300 sec. Although the guide number of the Speedlight used may be reduced to approximately 14 (ISO 100, m), this feature is great for taking flash pictures of moving subjects, or if you want to shoot at wide apertures in bright light.

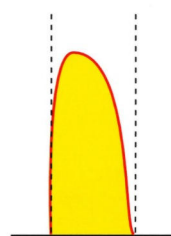
6) Wireless Slave Flash

Secondary SB-26 Speedlight unit(s) can be fired even though they're not connected to the camera body. In the "D" (delay) mode, the secondary Speedlight(s) fires 1 millisecond after the primary Speedlight (any Nikon Speedlight), thus preventing the primary Speedlight's TTL operation from being adversely affected. There's no limit to the number of secondary Speedlights (SB-26) that can be used.

7) Nikon Speedlights SB-26 and SB-27

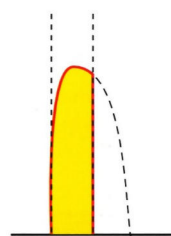
Nikon's SB-26 Speedlight boasts a powerful guide number of 36 (ISO 100, m; with zoom head set at 35mm). It offers such advanced features as Monitor Pre-flash, Repeating Flash for dramatic strobe effects and FP High-Speed Sync, which enables the use of a shallow depth of field in bright daylight.

1/300 TTL Sync Method



Regular duration

In regular flash sync., the sync speed is limited to 1/250 sec. based on flash duration.



Shortened duration

1/300 sec. TTL sync is achieved because flash duration is shortened.

Moreover, it's easy to configure a Wireless Slave Flash using two or more SB-26s. And the built-in AF-assist illuminator provides the F5 with autofocus capability even in total darkness. You can rotate and tilt the flash head for bounce flash photography, and flash coverage automatically adjusts for any focal length from 24 to 85mm. The built-in wide flash adapter even extends coverage to 18mm or 20mm. Flash output level compensation and manual flash control are also possible. There's even a built-in bounce card to produce catch-light effects.

The compact SB-27 offers a guide number of 30 (ISO 100, m; zoom head set at 35mm), Monitor Pre-flash, AF-assist illuminator, automatic zoom flash covering 24mm to 50mm, built-in diffuser card and bounce flash adapter.



SB-26



SB-27

Speedlights/feature cross reference chart

	SB-26	SB-27	SB-23	SB-22	SB-16B	SB-17	SB-16A	SB-21B	SB-21A
Connection	Direct	Direct	Direct	Direct	Direct	Via AS-6	Via AS-6	Direct	Via AS-6
TTL Auto	✓	✓	✓	✓	✓	—	—	✓	—
Non-TTL Auto	✓	✓	—	✓	✓	✓	✓	✓	✓
Manual	✓	✓	✓	✓	✓	✓	✓	✓	✓
AF assist illuminator	✓	✓	✓	✓	—	—	—	—	—
Slow Sync	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rear-Curtain Sync	✓	✓	✓	✓	✓	✓	✓	✓	✓
Repeating Flash	✓	—	—	—	—	—	—	—	—
Flash output level compensation	✓	✓	—	—	—	—	—	—	—
FP High-Speed Sync	✓	—	—	—	—	—	—	—	—
1/300 sec. TTL flash	✓	✓	✓	✓	✓	—	—	✓	—

✓ Available — Not available



3D Multi-Sensor Balanced Fill-Flash



Wireless Slave Flash (using seven SB-26s as additional slave flash units)



1/300 TTL High-Speed Sync



Slow Sync

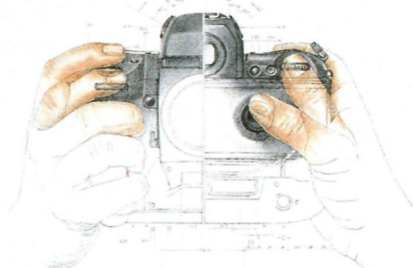




N i k o n

F5

HIGHLIGHTS

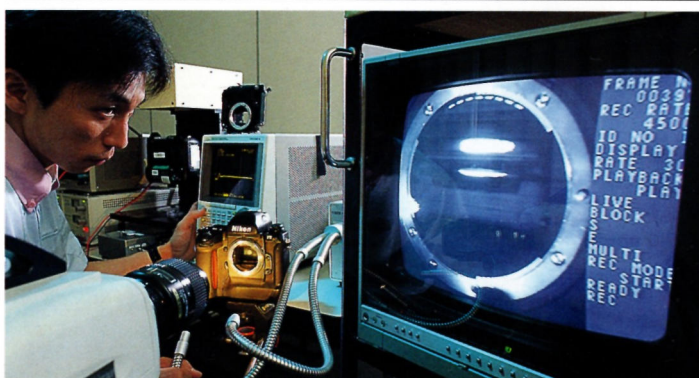


Solid and durable body

- Major components crafted from durable metals
- Drop-tested, vibration-tested and put through extremes of temperature

Floating mechanism for silent operation

- Motors and gears are attached to the camera body indirectly via a rubber "shock absorber" construction



Performance test of Mirror Balancer by ultra-high-speed camera



Nikon IBIS adjustment system for checking every product

Self-diagnostic double-bladed shutter

- Tested to 150,000 cycles
- Nikon's exclusive Shutter Monitor assures constant shutter release performance in any situation

Coreless motors

- Four coreless motors assure powerful and secure camera operation

Powerful computer network

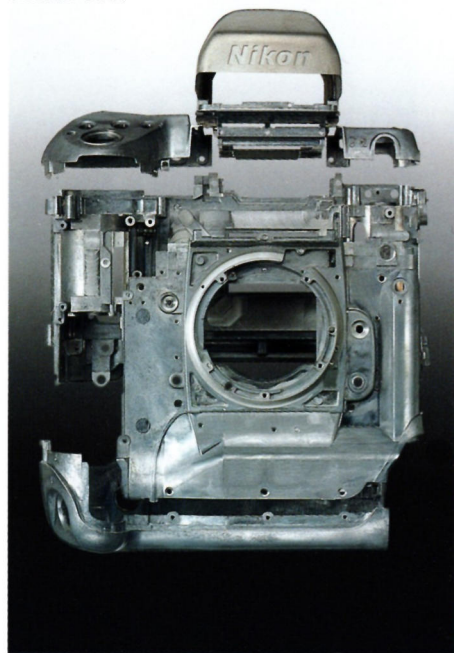
- Large computer network system with five Central Processing Units (CPU) including three 16-bit CPUs



Mock-up version designed by Giugiaro.

1) Solid and durable body construction

The F5 is extremely strong and built to take the toughest of punishments. The chassis, top shoulders and the bottom covers are made of tough aluminium diecast and the front-grip cover is aluminium alloy, giving them the rigidity and strength needed to maintain precise alignment. The viewfinder's top cover is made of titanium for extra resistance to impact. Rubber surfaces cover selected areas of this structure and are textured for secure holding and to provide a buffer against the environment and any impacts. The F5's design has been rigorously tested to assure reliable performance under demanding professional conditions. It is tested to resist moisture and dust. It is drop-tested, vibration-tested and put through extremes of temperature. Nikon's engineers envisioned how you will use it, then put it to real-life testing to ensure its high reliability in actual use.



2) Floating mechanism for silent operation

The interior of the F5 is designed to provide quick, precise, whisper-quiet movement. The mirror balancer, for example, helps reduce noise and vibration. And Nikon created a newer, faster-moving mirror, so it can keep up with other high-speed operations, like the motor's eight frames per second framing rate and the autofocus speed that keeps pace with the motor.

Thanks to a floating-type design, the coreless motors and gears are quieter, too. With their shock-absorber-like rubber-armoured construction, they minimise internally induced vibration. In the Continuous Silent film advance mode, you get quiet film advance—not just quiet, but also with a quality of sound that isn't metallic or shrill.

3) Double-bladed shutter with Shutter Monitor



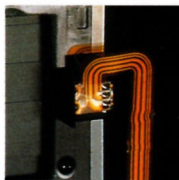
Material used for shutter blades

The F5's shutter blades are made using two different materials. Six of the

blades are made using a special epoxy which has carbon fiber reinforcement. The two other blades are made with aluminium alloy.

Dual-curtain system

To permit the Nikon F5 to have a mirror lock-up, and to ensure that there is virtually no chance of such light leaks, Nikon designed a unique shutter with a dual-curtain system. Unlike ordinary vertical focal-plane shutters, the F5's rear shutter curtain is closed until the shutter release. In other words, the F5 uses both front and rear curtains to avoid the possibility of light leaking past the edges of the shutter blade, while most cameras use only a front curtain.

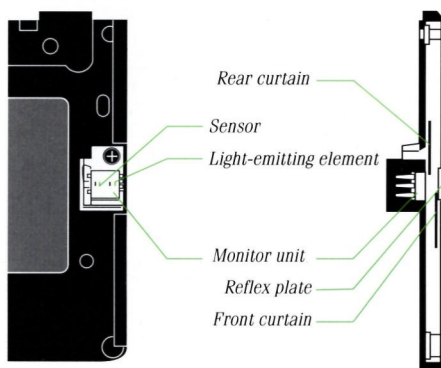


Shutter Monitor

The F5 features a Shutter Monitor to maintain consistently accurate shutter performance. The Shutter

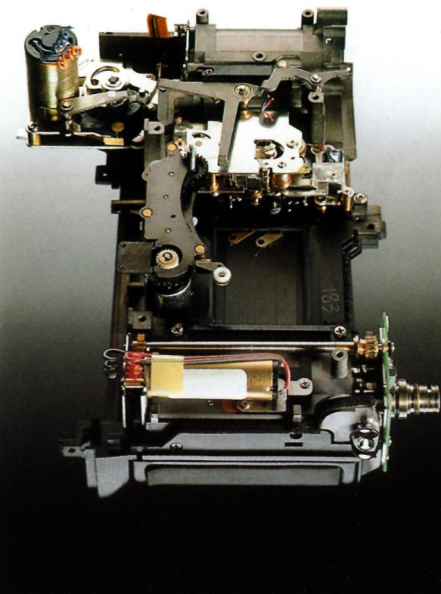
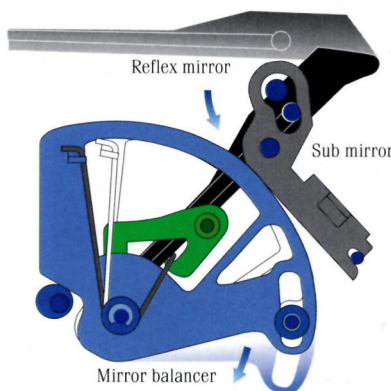
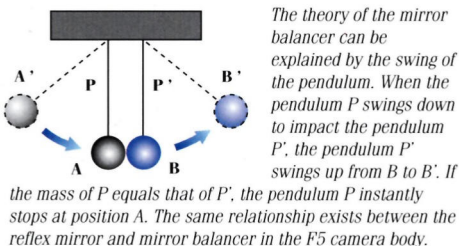
Monitor checks the shutter every time it's released. If speeds begin to shift from the calibrated speed, the camera automatically compensates to maintain an accurate exposure. If in an extreme instance the shutter fails to operate, the F5 will alert you.

Shutter Monitor



The light emitted from the monitor unit reflects off the reflex plate during exposure. This monitor makes it possible to detect actual exposure time and shutter operation malfunctions.

Mirror balancer

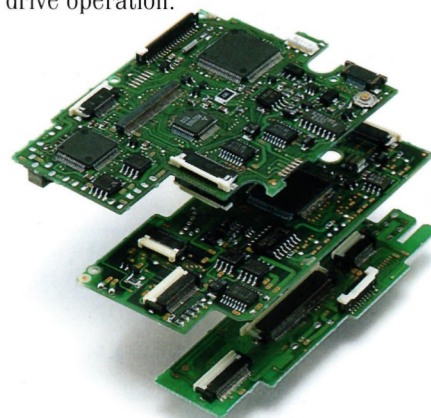


4) Mirror balancer

The F5's mirror balance mechanism minimises mirror bounce, thus reducing the time required to bring the mirror down. This results in smoother AF detection and also contributes to the F5's fast and accurate Focus Tracking and 8-frames-per-second film advance speed.

5) Coreless motors

The F5's shutter charge, film winding, rewinding and lens drive motors are all coreless. Unlike conventional cored motors, which demand great inertia to rotate, coreless motors require a much smaller degree of inertia to do the same. This results in higher power with a minimum of electricity, smoother motor rotation, reduced vibration and electric noise, and extremely quick response—all ideal features for smooth and quick drive operation.



6) Powerful computer network

Beneath the F5's rugged exterior is a network of powerful computers doing what they do best—taking care of complex operations, calculations and providing unsurpassed capabilities. The network is a hybrid circuit construction that includes three 16-bit, one 8-bit and one 4-bit CPUs, all coordinated to process data for focus detection, sequence control, 3D Colour Matrix Metering, Liquid Crystal Display and more. The F5 has a larger ROM capacity, more, in fact, than any other camera before it. For those more concerned with performance than technical specifications, this simply means the F5 works better than anything that came before it.



N i k o n

F5



24-1

CUSTOM

Using the Custom Settings feature, you can create a combination of functions that are different from the initial factory settings. They are listed below.

Custom Setting Menu

#0 Selecting Custom Settings

- 0-A:** Custom settings A
- 0-B:** Custom settings B

You can specify the setting combinations you want for A and for B; this makes it easy to switch from one setting combination to another.

#1 Continuous Servo AF

- 1-G:** Release-priority
- 1-I:** Focus-priority

Change from release-priority to focus-priority

#2 Single Servo AF

- 2-G:** Focus-priority
- 2-I:** Release-priority

Change from focus-priority to release-priority

#3 Bracketing order

- 3-G:** Metered value, below metered value, above metered value
- 3-I:** Below metered value, metered value, above metered value

Change the order to under the metered value, the metered value and over the metered value

#4 Autofocus activated when shutter release button is lightly pressed

- 4-G:** Activated
- 4-I:** Disabled

Delete shutter release button's AF activation function

#5 AE Lock

- 5-G:** Exposure value
- 5-I:** Shutter speed and aperture value

Lock shutter speed and aperture for AE lock function

#6 Direction of command dial rotation

- 6-G:** Default
- 6-I:** Opposite

Change from left-to-right to right-to-left when increasing values

#7 AE lock when shutter release button is lightly pressed

- 7-G:** Disabled
- 7-I:** Activated

Lock exposure when the shutter release button is lightly pressed

#8 Automatic film advance to frame #1

- 8-G:** Disabled
- 8-I:** Enabled (when power is on)

The film automatically advances to the first frame when you close the camera back

#9 Film advance speed in CH

- 9-G:** Default (8 fps)
- 9-I:** Change setting
- CHB:** 8 fps **CH6:** 6 fps

Change from 8 frames per second to 6 fps

#10 Film advance speed in CL

- 10-G:** Default (3 fps)
- 10-I:** Change setting
- CL5:** 5 fps **CL4:** 4 fps
- CL3:** 3 fps

Change from 3 fps to 5 fps or 4 fps

#11 Alert LED in long time exposure

- 11-G:** Does not blink
- 11-I:** Blinks

Make Alert LED blink during long time exposure.

#12 Auto film stop

- 12-G:** Disabled (film advances until the end of the roll)
- 12-I:** Change setting
- E35:** Frame 35 **E36:** Frame 36
- E--:** Disabled

Stop film advance at frame 35 or 36.

#13 Multiple Exposure

- 13-G:** Cancelled after release
- 13-I:** Still on after release

Continue Multiple Exposure after the second shot.

#14 Centre-Weighted Metering

- 14-G:** Default (75% concentration in 12mm dia. area)
- 14-I:** Change setting
- E8:** 8mm dia. **E12:** 12mm dia.
- E15:** 15mm dia. **E20:** 20mm dia.
- R:** Average **PC:** Custom (by PC)

Change 12mm-dia. area to 8, 15, 20mm, average metering or customise the diameter (i.e., by using the computer link).

#15 Time delay for auto meter-switch-off

- 15-G:** Default (16 sec.)
- 15-I:** Change setting
- L4:** 4 sec. **L8:** 8 sec.
- L16:** 16 sec. **L32:** 32 sec.

Change from 16 to 4, 8, or 32 seconds

#16 Self-timer duration

- 16-G:** Default (10 sec.)
- 16-I:** Change setting
- L2 to L60:** 2 to 60 sec.

Choose from 2 to 60 seconds

#17 Bracketing in manual exposure mode

- 17-G:** Default (shifts shutter speed)
- 17-I:** Change setting
- 18:** Shutter speed/aperture combination
- 18A:** Shutter speed
- 18B:** Aperture
- 18C:** Flash output level

Change the shifting factor in the Manual Exposure mode from shutter speed to choice of shutter speed/aperture combination, aperture or flash output level

#18 Focusing screen compensation

- 18-G:** No compensation
- 18-I:** Change setting
- 2.0 to 2.0:** -2 to +2 in 0.5 EV steps

Change the EV level of the focusing screen from -2.0 to +2.0 in 0.5 EV steps. See specific focusing screen instruction manual for required compensation value.

#19 Prolonged shutter speed

- 19-G:** Disabled
- 19-I:** Enabled

Choose from 40 seconds to 30 minutes duration

#20 Top TTL flash sync speed

- 20-G:** Default (1/250 sec.)
- 20-I:** Change setting
- 300:** 1/300 sec. **250:** 1/250 sec.
- 200:** 1/200 sec. **160:** 1/160 sec.
- 125:** 1/125 sec. **100:** 1/100 sec.
- 80:** 1/80 sec. **60:** 1/60 sec.

To set top TTL flash sync speed. 1/300 sec.* can be selected only in the Shutter-Priority Auto or Manual exposure modes.

*The shutter speed is controlled to 1/250 in the Programmed Auto or Aperture-Priority Auto exposure modes.

#21 AE-L/AF-L button

- 21-G:** Default (simultaneous lock)
- 21-I:** Change setting
- AE L:** AE lock
- AF L:** AF lock
- L-L:** Simultaneous lock

Change to AE lock only or AF lock only

#22 Aperture setting via Sub-Command Dial

- 22-G:** Enabled
- 22-I:** Disabled

The only way to set aperture is to rotate the lens aperture ring.

#23 ► or ◀ focus indicator

- 23-G:** Displayed
- 23-I:** Not displayed

Don't show the display of ► and ◀ (focused at rear or in front of the subject) in the viewfinder during the Autofocus mode.

#24 Auto Exposure/Flash Exposure Bracketing

- 24-G:** Default (Auto Exposure/Flash Exposure Bracketing)
- 24-I:** Change setting
- 0 IE:** Auto Exposure (ambient exposure) Bracketing
- 10E:** Flash Exposure Bracketing
- 1 IE:** Auto Exposure/Flash Exposure Bracketing

When you want only Auto Exposure Bracketing or Flash Exposure Bracketing.

Extensive Nikkor Lens Compatibility

The F5 features the legendary Nikon F lens mount which accepts a huge family of Nikkor lenses. The camera can also be used with a wide range of non-AF Nikkor lenses from 6mm to 2000mm.

The F5 is supplied with a fixed position AI indexing mechanism. Service modification (to add an adjustable AI indexing lever) is required to use non-AI lenses.

COMPATIBLE LENSES

AF Nikkors

AF 20-35mm f/2.8D IF
AF 24-50mm f/3.3-4.5D
AF 28-70mm f/3.5-4.5D
AF 28-80mm f/3.5-5.6D
AF 28-85mm f/3.5-4.5
AF 35-70mm f/2.8D
AF 35-80mm f/4-5.6D
AF 35-105mm f/3.5-4.5D IF
AF 35-135mm f/3.5-4.5
AF 70-210mm f/4-5.6D
AF 75-300mm f/4.5-5.6
AF 80-200mm f/2.8D ED
AF 80-200mm f/4.5-5.6D
AF 18mm f/2.8D
AF 20mm f/2.8D
AF 24mm f/2.8D
AF 28mm f/1.4D
AF 28mm f/2.8D
AF 35mm f/2D

AF 50mm f/1.4D
AF 50mm f/1.8
AF 85mm f/1.4D IF
AF 85mm f/1.8D
AF 180mm f/2.8D IF-ED
AF 300mm f/2.8 IF-ED
AF-I 300mm f/2.8D IF-ED
AF-S 300mm f/2.8D IF-ED
AF 300mm f/4 IF-ED
AF-I 400mm f/2.8D IF-ED
AF-I 500mm f/4D IF-ED
AF-S 500mm f/4D IF-ED
AF-I 600mm f/4D IF-ED
AF-S 600mm f/4D IF-ED
AF Fisheye 16mm f/2.8D
AF Micro 60mm f/2.8D
AF Micro 105mm f/2.8D
AF Micro 200mm f/4D IF-ED
AF DC 105mm f/2D
AF DC 135mm f/2D

AI-P-type Nikkors

500mm f/4 P IF-ED
1200-1700mm f/5.6-8
P IF-ED

AI- and AI-S-type Nikkors

28-85mm f/3.5-4.5
35-70mm f/3.3-4.5
35-105mm f/3.5-4.5
35-135mm f/3.5-4.5
35-200mm f/3.5-4.5
80-200mm f/4
50-300mm f/4.5 ED
100-300mm f/5.6
180-600mm f/8 ED
13mm f/5.6
15mm f/3.5
18mm f/3.5
20mm f/2.8
24mm f/2

24mm f/2.8

28mm f/2
28mm f/2.8
35mm f/1.4
35mm f/2

50mm f/1.2
50mm f/1.4
50mm f/1.8
85mm f/1.4

105mm f/1.8
105mm f/2.5
135mm f/2

135mm f/2.8
180mm f/2.8 ED

200mm f/2 IF-ED
300mm f/2.8 IF-ED

300mm f/4.5 IF-ED
400mm f/2.8 IF-ED

400mm f/3.5 IF-ED
400mm f/5.6 IF-ED

600mm f/4 IF-ED

600mm f/5.6 IF-ED
800mm f/5.6 IF-ED

Fisheye 6mm f/2.8
Fisheye 8mm f/2.8

Fisheye 16mm f/2.8
Noct 58mm f/1.2

Micro 55mm f/2.8
Micro 105mm f/2.8

Micro 200mm f/4 IF
UV 105mm f/4.5

Other Nikkors
Reflex 500mm f/8

Reflex 1000mm f/11
Reflex 2000mm f/11

PC 28mm f/3.5
PC 35mm f/2.8

Medical 120mm f/4 IF

Lens Compatibility Chart

Lens	Focusing		Exposure mode				Metering system		
	AF	Electronic Range-finder	P mode	S mode	A mode	M mode	Colour Matrix	Centre-Weighted	Spot
AF-S, AF-I & D-type AF Nikkors	✓	✓	✓	✓	✓ ¹	✓ ¹	✓ ²	✓ ³	✓ ⁴
AF-I Teleconverters ⁵	✓ ⁶	✓ ⁶	✓	✓	✓ ¹	✓ ¹	✓ ²	✓ ³	✓ ⁴
Non-D-type AF Nikkors	✓	✓	✓	✓	✓ ¹	✓ ¹	✓	✓ ³	✓ ⁴
AI-P-type Nikkors	—	✓ ⁷	✓	✓	✓ ¹	✓ ¹	✓	✓ ³	✓ ⁴
AI-type Nikkors	—	✓ ⁷	—	—	✓	✓	—	✓	✓
AI-modified Nikkors	—	✓ ⁷	—	—	✓	✓	—	✓	✓
Medical-Nikkor	—	✓	—	—	—	✓ ⁸	—	✓ ⁹	✓ ⁹
Reflex-Nikkors	—	—	—	—	✓ ¹⁰	✓ ¹⁰	—	✓	✓
PC-Nikkors	—	✓ ¹¹	—	—	✓ ¹²	✓	—	✓ ¹¹	✓ ¹¹
AI-type Teleconverters	—	✓ ⁶	—	—	✓	✓	—	✓ ¹³	✓ ¹³
Bellows Focusing Attachment PB-6	—	✓ ⁶	—	—	✓	✓	—	✓ ¹³	✓ ¹³

✓ Compatible — Incompatible

- Aperture can be selected via Sub-Command Dial.
- 3D Colour Matrix Metering is selected.
- Size of the sensing area can be changed by Custom Setting #14.
- Metering area corresponds to the selected focus area.
- Compatible with AF-S and AF-I Nikkor lenses only.
- With maximum effective aperture of f/5.6 or faster.
- With maximum aperture of f/5.6 or faster.
- With shutter speed set to 1/125 sec. or slower.
- By stop-down metering.
- Aperture cannot be selected.
- Without shift.
- Exposure determined by presetting lens aperture. Exposure must also be determined before shifting; use AE-L/AF-L button before shifting.
- Exposure compensation necessary depending on the lens in use.





DP-30



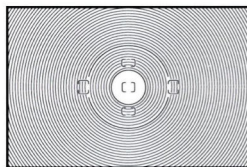
DA-30



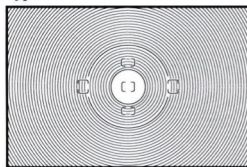
DW-31



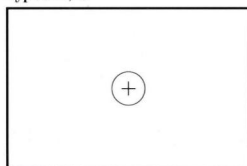
DW-30



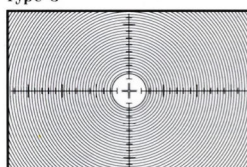
Type EC-B



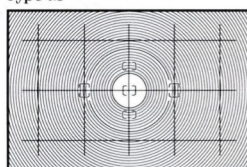
Types B, U



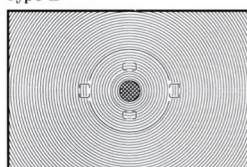
Type C



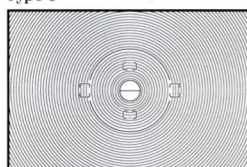
Type M



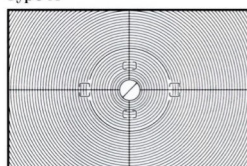
Type E



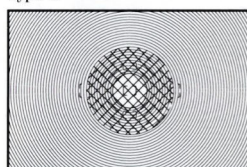
Type J



Type A



Type L



Types G1-4

Viewfinder/Metering System Compatibility

	Matrix	Centre-Weighted	Spot*
Multi-Meter Finder DP-30	✓ (3D Colour)	✓	✓
AE Action Finder DA-30	✓ (Five-segment)	✓	✓
6x High-Magnification Finder DW-31	—	—	✓
Waist-Level Finder DW-30	—	—	✓

✓: Available —: Not available

* For the DP-30, the Spot Metering area is 4mm-dia. when used with EC-B type screen and 6mm-dia. when used with other screens. For other viewfinders, the Spot Metering area is 3mm-dia.

Interchangeable Viewfinders

The standard Multi-Meter Finder is interchangeable with three other optional viewfinders, all of which offer virtually 100% frame coverage.

Multi-Meter Finder DP-30

High-eyepoint type. Incorporates a built-in dioptre adjustment knob (−3 to +1 dioptres), ISO-standard accessory shoe, eyepiece shutter and metering system selector.

AE Action Finder DA-30

High-eyepoint type (approx. 60mm). Ideal when normal viewing is difficult or impossible, such as when wearing a helmet or goggles, or when the camera is encased in a special housing for underwater photography.

6x High-Magnification Finder DW-31

For critical high-magnification close-up work and photomicrography. The sophisticated optical system provides a clear, sharp view of the entire image at approximately 6x magnification. Fitted with a −5 to +3 adjustment for individual eyesight correction. Rubber eyecup and rubber eyepiece cap are provided.

Waist-Level Finder DW-30

For use when the F5 is positioned at a low angle or on a copystand. Fold-up type viewing hood provided. The built-in flip-up magnifier provides an approx. 5x magnification at the centre of the image for accurate focusing.

Interchangeable Focusing Screens

These special Nikon optics are ideal for manual focusing and assisting in composition, and do not affect the F5's autofocus operation. Types EC-B, A, B, E, G1-4, J, L and U incorporate focus brackets for five focus areas; Types EC-B, A, B, E, J, L and U, use a 12mm circle for Centre-Weighted Metering. Types EC-B, A, B, E, C, J and U feature an advanced BriteView configuration for bright, clear images.

Type EC-B: This new standard screen shows the focus area selected and offers unobstructed viewing and easy focusing on its overall matte surfaces.

Types B, U: These offer unobstructed viewing and easy focusing on their overall matte surfaces.

Types C, M: For high-magnification close-ups and for astrophotography.

Type E: The grid pattern of this screen makes it ideal for architectural photography.

Type J: The microprism is great for general photography.

Types A, L: Feature a matte Fresnel field with split-image range finder and microprism collar.

Types G1-4: Perfect for shooting in dim light or for fast-moving subjects. There are four models available to match various focal lengths.

Viewing Accessories



Eyepiece Correction Lenses

These enable near- and farsighted photographers to view the finder image accurately without having to wear glasses. Five lenses are available, -3, -2, 0, +1, +2 dioptres.

Rubber Eyecup DK-2

Increases viewing comfort and prevents stray light from entering the viewfinder.

Right-Angle Viewing Attachment DR-3

Provides an upright and unreversed image with right-angle viewing. Individual eyesight adjustment possible. Perfect for copy work.

Eyepiece Magnifier DG-2

Provides 2× magnification of the central portion of the finder image. Eyesight adjustment is provided.

Eyepiece Adapter DK-7

Allows you to attach the DR-3 or DG-2 to the eyepiece of the Multi-Meter Finder DP-30.



Optional Camera Backs

Multi-Control Back MF-28

The optional MF-28 enables the imprinting combination of data in-frame (7 segments, 6 digits; year/month/day, month/day/year, day/month/year, day/hour/minute, hour/minute/second, film number, serial upcount number or fixed number) or between-frames (alphanumeric, 22 digits; year/month/day/hour/minute/second, year/month/day/hour/up to 8 characters, month/day/hour/minute/up to 8 characters, day/hour/minute/second/up to 8 characters, up to 22 characters, film number, shutter speed/aperture, compensation value in Auto Bracketing, or caption up to 18 characters/year).

In addition, the MF-28 enables the F5 to function in more advanced ways—Interval Timer: Commencement time, interval time, number of shots taken and number of intervals can be input. Long Time Exposure: You can choose any duration from one second up to 999 seconds, 999 minutes or 999 hours. Auto Bracketing: You can shoot up to 9 continuous frames, each with a different exposure. Freeze Focus: Shutter is automatically released the moment the subject enters in-focus position.



The MF-28 can imprint copyright indication. It provides identification for film immediately upon processing and supplements copyright protection.

Fully enforceable copyright protection requires additional legal action by the photographer.



Data Back MF-27

Imprints selected date and time information within frame; your choice of Year/Month/Day, Month/Day/Year, Day/Hour/Minute—or No Imprint.



Close-Up Accessories

Auto Extension Rings PK-11A/12/13

Slides on and off your camera in seconds for a wide range of reproduction ratios.

Bellows Attachment PB-6

Mounts between the F5 (with an Auto Extension Ring attached) and the lens for close-up and macro photography.

Optional accessories include PB-6E Extension Bellows, PB-6M Macro Copy Stand and PS-6 Slide Copying Adapter.

Repro-Copy Outfit PF-4

Allows you to make high-quality photographic copies of photographs, illustrations, drawings and diagrams.

Macro Adapter Ring BR-2A

Enables lenses to be mounted in reverse for a relatively high reproduction ratio.

Focusing Stage PG-2

Simplifies close-up focusing when using a tripod-mounted camera.

Close-Up Attachment Lenses

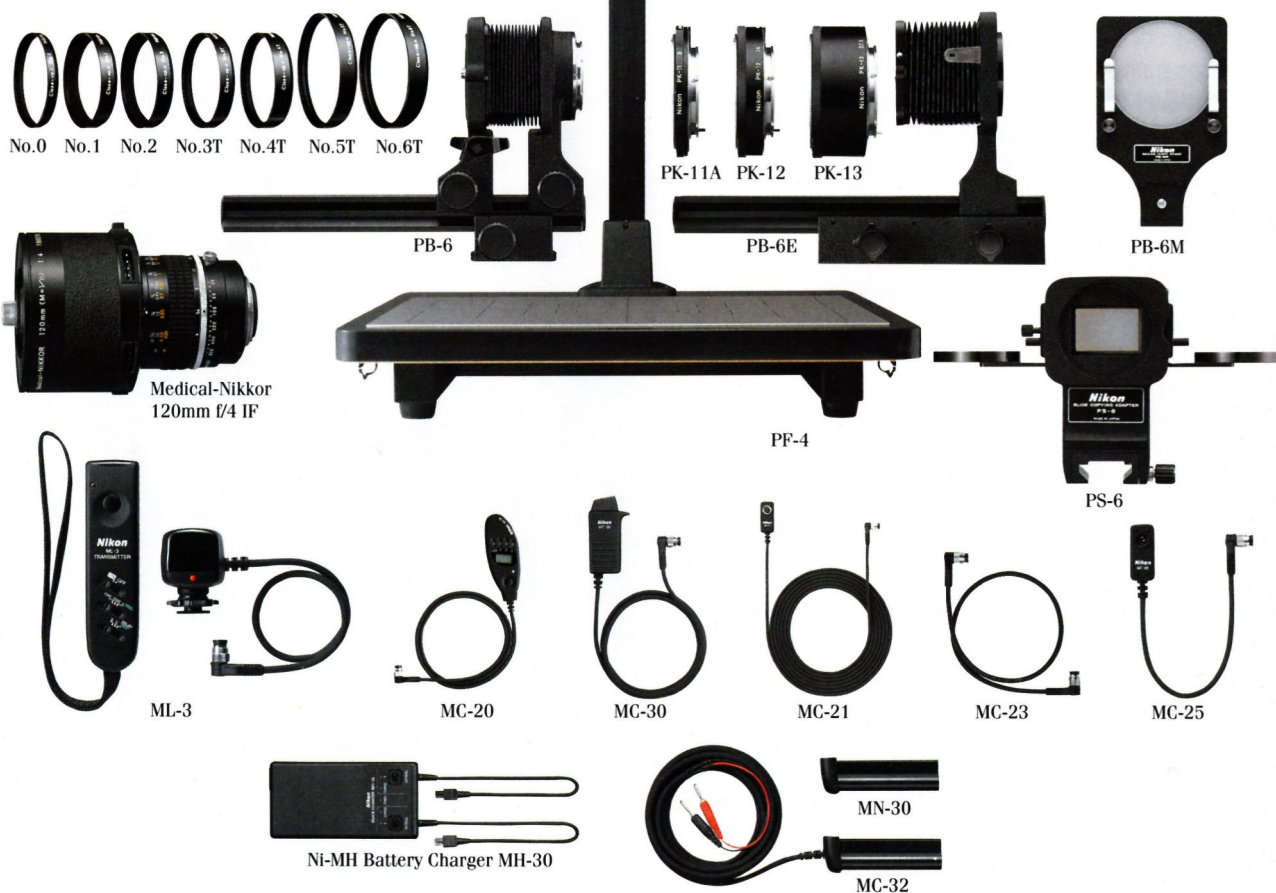
Provides an easy way to explore close-up photography. Seven kinds available — 0, 1, 2, 3T, 4T, 5T, 6T.

Medical-Nikkor 120mm f/4 IF

Features a built-in ring-light for automatic quick close-up photography.

TTL Macro Speedlight SB-21B

Gives you the choice of flash front lighting or selective relief lighting.



Remote Control Accessories

Modulite Remote Control Set ML-3

Provides infrared LED beam remote control for two separate channels to enable automatic camera operation from a distance of up to 8 meters.

Remote Cord MC-20

Enables remote firing of the F5 and setting of exposures up to 9 hrs. 59 min. 59 sec. long. The LCD tells you the exposure time.

Remote Cord MC-30

Enables remote firing with a trigger-lock function.

Extension Cord MC-21

Available for 10-pin remote accessories.

Connecting Cord MC-23

Connects two F5 cameras for simultaneous shutter release.

Adapter Cord MC-25

Enables the use of Remote Cord MC-12A/12B, Radio Control Set MW-2 and Modulite Remote Control Set ML-2.

Power Sources

The standard MS-30 battery holder accepts 8 AA-type alkaline or lithium batteries. The optional Ni-MH Battery Unit MN-30 maximises power and speed. The External Power Cord MC-32 with two banana-type plugs connects 12V external power source to the F5.

Personal Computer Links



Nikon designed two computer link software packages exclusively for the F5. AC-1WE links the camera via Personal Computer Connecting Cord MC-33 with a PC based on Windows 95®; AC-1ME links the F5 via Personal Computer Connecting Cord MC-34 with a personal computer operating on a Macintosh® System 7.1. These links allow you to set various F5 operations from a personal computer. You can also download shooting data stored on the F5, thus allowing you to manipulate it on your personal computer.

Contents of the software

Install Program

Camera ID Setting Program

Camera Operation

Displays settings of connected cameras
(Displays each setting on the monitor)

Remote camera setting and operation
(Enables setting of 20 items)

Custom Settings

(Enables custom setting of 41 items)

Program shooting

(Enables programming of camera settings for each frame)

Colour Matrix Meter status

(Displays distribution of colour and brightness in the scene)

Confirming camera ID

(Blinking self-timer LED confirms which camera is in operation)

Shooting data finder

(Allows you to search for data on specific frames)

Photo finder

(Lets you scan the images via scanner and link them with shooting data)

List of custom settings

Enables customised settings of the following items in addition to those listed on P. 22.

- Slowest sync speed: Choose from 1/60 to 30 sec.
- Aperture setting during zooming: Allows you to vary the aperture according to the focal length setting you choose while zooming.
- Lock button: Pressing this button in combination with the Command Dials lets you change shutter speed and aperture settings.
- Value settings via command dials: Values automatically reset (highest and lowest values are adjacent).
- Focus area selection: Disables diagonal focus area shift (e.g. left to top, or bottom to right).
- Shutter release time lag: Allows you to delay shutter release up to 1 sec.
- Focus area indication: Delete the focus area indication outside finder screen.
- Data imprint on frame #0.
- Bulb/Time selection: Choose from Bulb or Time shutter release options.
- Shutter release indication: Self-timer indicator will light up when shutter is released.
- Data storage option: You can store the data in F5's memory until it is sent.
- Focus lock in AF-S mode: Lock focus during continuous shooting in AF-S mode.
- Focus area sequencing in Dynamic AF: Allows you to select either horizontal or vertical focus area sequencing.
- Multiple camera shooting: Choose from simultaneous, in-sequence time lag or individual shutter release options.
- Data full warning: Camera warns you when the camera's data recording memory is full.
- Recording data selection: Lets you select shooting data to be recorded in the camera's memory.
- Camera setting lock: You can lock the desired camera settings.

All products indicated by trademark symbols are trademarked and/or registered by their respective companies.

Specifications and design are subject to change without notice.



Film Manager

Data loading

(Downloads the F5's shooting data and files it)

Film viewer

(Displays data for each frame)

File edit

(You can input the titles and comments by frame)

7.004931	-1.05	6.704931
7.149382	-1.9	6.849382
7.299452	-1.85	6.999452
7.455418	-1.8	7.155418
7.617568	-1.75	7.317568
7.786204	-1.7	7.486204
7.961434	-1.65	7.661634
8.14418	-1.6	7.84418
8.334138	-1.55	8.034138
8.531832	-1.5	8.231832
8.737806	-1.45	8.437806
8.952121	-1.4	8.652121
9.175203	-1.35	8.875203
9.40736	-1.3	9.10736
9.648876	-1.25	9.348876
9.9	-1.2	9.6
10.13098	-1.15	9.86132
10.4318	-1.1	10.1318
10.71266	-1.05	10.41285
11.09344	-1.0	10.70344
11.30381	-0.95	11.00381
11.61371	-0.9	11.31371
11.93221	-0.85	11.63221
12.25855	-0.8	11.95855
12.59154	-0.75	12.29154
12.92864	-0.7	12.62864
13.27087	-0.65	12.97087
13.6128	-0.6	13.3128
13.95251	-0.55	13.65251
14.29652	-0.5	13.98652
14.64384	-0.45	14.32384
14.92008	-0.4	14.60008
15.2120	-0.35	14.9120
15.47893	-0.3	15.17893
15.7829	-0.25	15.4829
16.0721	-0.2	15.7721
16.2753	-0.15	16.0753
16.4823	-0.1	16.2823
16.6923	-0.05	16.4923
16.9053	0	16.7053
17.1213	0.05	16.9213
17.3403	0.1	17.1403
17.5623	0.15	17.3623
17.7873	0.2	17.5873
18.0153	0.25	17.8153
18.2463	0.3	18.0463
18.4803	0.35	18.2803
18.7173	0.4	18.5173
18.9573	0.45	18.7573
19.2003	0.5	18.9503
19.4463	0.55	19.1963
19.6953	0.6	19.4453
19.9473	0.65	19.6973
20.2023	0.7	19.9523
20.4603	0.75	20.2103
20.7213	0.8	20.4713
20.9853	0.85	20.7353
21.2523	0.9	21.0023
21.5223	0.95	21.2723
21.7953	1.0	21.5453
22.0713	1.05	21.8213
22.3503	1.1	22.1003
22.6323	1.15	22.3823
22.9173	1.2	22.6673
23.2053	1.25	22.9553
23.4963	1.3	23.2463
23.7903	1.35	23.5403
24.0873	1.4	23.8373
24.3873	1.45	24.1373
24.6903	1.5	24.4403
24.9953	1.55	24.7453
25.3023	1.6	25.0523
25.6113	1.65	25.3613
25.9223	1.7	25.6723
26.2353	1.75	25.9853
26.5503	1.8	26.2903
26.8673	1.85	26.6073
27.1863	1.9	26.9263
27.5073	1.95	27.2473
27.8303	2.0	27.5703
28.1553	2.05	27.8953
28.4823	2.1	28.2223
28.8113	2.15	28.5513
29.1423	2.2	28.8823
29.4753	2.25	29.2153
29.8103	2.3	29.5503
30.1473	2.35	29.8873
30.4863	2.4	30.2263
30.8273	2.45	30.5673
31.1703	2.5	30.9103
31.5153	2.55	31.2553
31.8623	2.6	31.6023
32.2113	2.65	31.9513
32.5623	2.7	32.3023
32.9153	2.75	32.6553
33.2703	2.8	33.0103
33.6273	2.85	33.3673
33.9863	2.9	33.7263
34.3473	2.95	34.0873
34.7103	3.0	34.4503
35.0753	3.05	34.8153
35.4423	3.1	35.1823
35.8113	3.15	35.5513
36.1823	3.2	35.9223
36.5553	3.25	36.2953
36.9303	3.3	36.6703
37.3073	3.35	37.0473
37.6863	3.4	37.4263
38.0673	3.45	37.8073
38.4503	3.5	38.1903
38.8353	3.55	38.5753
39.2223	3.6	38.9623
39.6113	3.65	39.3513
40.0023	3.7	39.7423
40.3953	3.75	40.1353
40.7903	3.8	40.5303
41.1873	3.85	40.9273
41.5863	3.9	41.3263
41.9873	3.95	41.7273
42.3903	4.0	42.1303
42.7953	4.05	42.5353
43.2023	4.1	42.9423
43.6113	4.15	43.3513
44.0223	4.2	43.7623
44.4353	4.25	44.1753
44.8503	4.3	44.5903
45.2673	4.35	45.0073
45.6863	4.4	45.4263
46.1073	4.45	45.8473
46.5303	4.5	46.2623
46.9553	4.55	46.6803
47.3823	4.6	47.0993
47.8113	4.65	47.5203
48.2423	4.7	47.9423
48.6753	4.75	48.3663
49.1103	4.8	48.7913
49.5473	4.85	49.2173
49.9863	4.9	49.6443
50.4273	4.95	50.0723
50.8703	5.0	50.5013
51.3153	5.05	50.9313
51.7623	5.1	51.3623
52.2113	5.15	51.7943
52.6623	5.2	52.2273
53.1153	5.25	52.6613
53.5703	5.3	53.0963
54.0273	5.35	53.5323
54.4863	5.4	53.9693
54.9473	5.45	54.4073
55.4103	5.5	54.8463
55.8753	5.55	55.2863
56.3423	5.6	55.7273
56.8113	5.65	56.1693
57.2823	5.7	56.6123
57.7553	5.75	57.0563
58.2303	5.8	57.5013
58.7073	5.85	57.9473
59.1863	5.9	58.3943
59.6673	5.95	58.8423
60.1503	6.0	59.2913
60.6353	6.05	59.7413
61.1223	6.1	60.1923
61.6113	6.15	60.6443
62.1023	6.2	61.0973
62.5953	6.25	61.5513
63.0903	6.3	62.0063
63.5873	6.35	62.4623
64.0863	6.4	62.9193
64.5873	6.45	63.3773
65.0903	6.5	63.8363
65.5953	6.55	64.2963
66.1023	6.6	64.7573
66.6113	6.65	65.2193
67.1223	6.7	65.6823
67.6353	6.75	66.1463
68.1503	6.8	66.6113
68.6673	6.85	67.0773
69.1863	6.9	67.5443
69.7073	6.95	68.0123
70.2303	7.0	68.4813
70.7553	7.05	68.9513
71.2823	7.1	69.4223
71.8113	7.15	69.8943
72.3423	7.2	70.3673
72.8753	7.25	70.8413
73.4103	7.3	71.3163
73.9473	7.35	71.7923
74.4863	7.4	72.2693
75.0273	7.45	72.7473
75.5703	7.5	73.2263
76.1153	7.55	73.7063
76.6623	7.6	74.1873
77.2113	7.65	74.6693
77.7623	7.7	75.1513
78.3153	7.75	75.6343
78.8703	7.8	76.1183
79.4273	7.85	76.6033
79.9863	7.9	77.0893
80.5473	7.95	77.5763
81.1103	8.0	78.0643
81.6753	8.05	78.5533
82.2423	8.1	79.0433
82.8113	8.15	79.5343
83.3823	8.2	80.0263
83.9553	8.25	80.5193
84.5303	8.3	81.0133
85.1073	8.35	81.5083
85.6863	8.4	82.0043
86.2673	8.45	82.5013
86.8503	8.5	83.0



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